

**Labsheet 4.3A****Frogs, Fleas, and Painted Cubes****First and Second Differences**

$y = 2x(x + 3)$

<i>x</i>	<i>y</i>
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	

First Differences      Second Differences

$y = 3x - x^2$

<i>x</i>	<i>y</i>
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	

First Differences      Second Differences

$y = (x - 2)^2$

<i>x</i>	<i>y</i>
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	

First Differences      Second Differences

$y = x^2 + 5x + 6$

<i>x</i>	<i>y</i>
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	

First Differences      Second Differences